

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

ELIMINATION REPORT
FOR
THE MUSEUM OF SCIENCE AND INDUSTRY
CHICAGO, ILLINOIS

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Department of Energy
Office of Nuclear Energy
Office of Remedial Action and Waste Technology
Division of Facility and Site Decommissioning Projects

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**ELIMINATION REPORT
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INTRODUCTION

The Department of Energy (DOE), Office of Nuclear Energy, Office of Remedial Action and Waste Technology, Division of Facility and Site Decommissioning Projects (and/or the predecessor agencies, offices, and divisions) has reviewed the past activities of the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC) and completed a radiological survey at the Museum of Science and Industry, 57th Street and Lake Shore Drive, Chicago, Illinois. DOE has determined that the conditions at this site are in compliance with current radiological guidelines and standards and that no potential for radiological exposure exists beyond those resulting from natural background. Therefore, this site requires no remedial action and will not be included the Formerly Utilized Sites Remedial Action Program.

This report presents information supporting the determination that the radiological conditions at the Museum of Science and Industry are in compliance with current DOE radiological guidelines and standards¹ and provides assurance that use of these areas will not result in any measurable radiological hazard to site occupants or the general public.

¹U.S. Department of Energy Guidelines for Residual Radioactivity at Formerly Utilized Sites Remedial action Program and Remote Surplus Facilities Management Program Sites (Rev. 1, July 1985).

This elimination report will be archived by DOE through the Assistant Secretary for Management and Administration. A copy of this package will be available for public review between 8:00 a.m. and 4:00 p.m., Monday through Friday (except Federal holidays), at the DOE Public Document Room located in Room 1E-190 of the Forrestal Building, 1000 Independence Avenue, SW., Washington, D.C.

BACKGROUND

Site Function

Portions of the Museum of Science and Industry were occupied by operations of the Metallurgical Laboratory and Argonne National Laboratory from August 15, 1946, to July 15, 1953. The work was conducted for MED and AEC. Based on the limited information obtained from records search and discussions with persons employed at the laboratory during that period, it is believed that some radioactive materials were handled at this facility; however, the type and activity is unknown.

Site Description

The Museum of Science and Industry is located at 1701 East 57th Street. The location of the site is shown on a map of the University of Chicago environs (Figure 1). The areas occupied by the Metallurgical Laboratory and Argonne Laboratory included 36,000 square feet in the ground, first, and balcony floors of the East Pavilion and 16,000 square feet in the second balcony of the west court of the central Pavilion.

The ground and first floors of the East Pavilion are now occupied by the University of Chicago for storage and office space and are also used in support of the museum's operations. The second balcony of the West Court is used as office space by the Museum of Science and Industry and the Academy of Interscience Methodology.

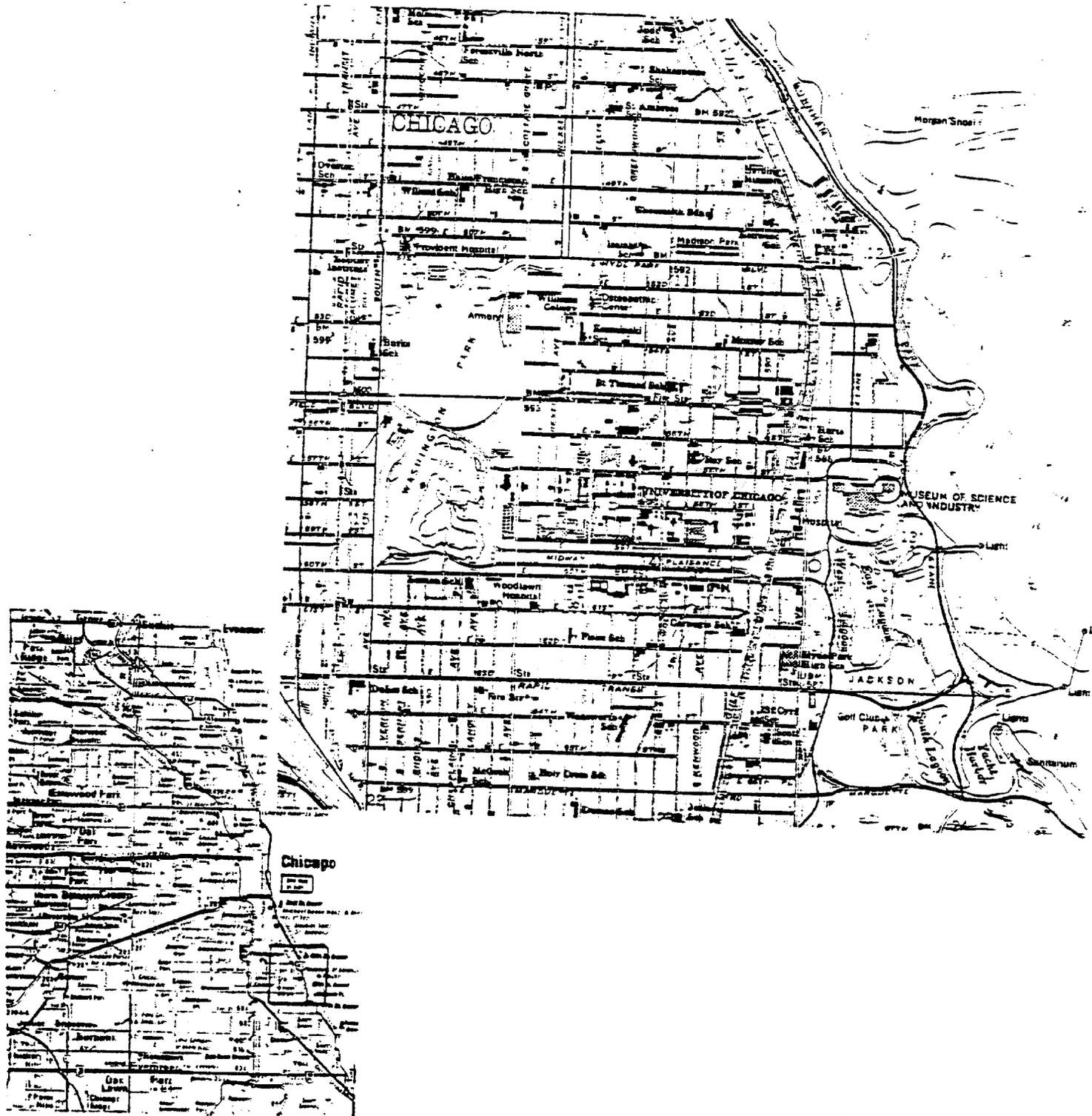


Figure 1. Museum of Science and Industry Location
 (East Pavilion and West Court of Central Pavilion circled)

Radiological History and Status

Records indicate that a radiological survey of this facility was completed on July 12, 1949. No radioactivity above background levels was detected during that survey on any building surfaces or on any equipment remaining in the building.

Because the instruments used in the 1949 survey were not very sensitive by current standards, the Chicago Operations Office and Argonne National Laboratory resurveyed the facility from January 11 to April 13, 1977. The survey detected no radioactivity above background in the areas of the museum used for the MED and AEC work.

ELIMINATION ANALYSIS

Survey measurements indicate radiation levels typical of natural background for the area. Therefore, no significant quantity of MED/AEC-related material remains at this site. Based on the information summarized in this report, DOE's Division of Facility and Site Decommissioning Projects has determined that no remedial action is necessary at this site and has eliminated the Museum of Science and Industry from further consideration under the Formerly Utilized Sites Remedial Action Program.

REFERENCES

- o Payne, G.O. and J.H. Pingel (Argonne National Laboratory), to J.E. Rose and L.D. Marinelli (Argonne National Laboratory), "Final Survey of the East Pavilion of the Museum of Science & Industry," July 19, 1949.
- o Marinelli, L.D. (Argonne National Laboratory), to J.H. McKinley (Argonne National Laboratory), "Completed Survey for Contamination of the East Pavilion of the Museum of Science and Industry Building," July 19, 1949.
- o Armstrong, J.E. (Atomic Energy Commission), to J.H. McKinley (Argonne National Laboratory), "East Wing of the Museum of Science and Industry," June 24, 1949.

- o Neal, P.E. (Argonne National Laboratory), to Manager, Chicago Operations Office, "Decommissioned AEC Facilities, City of Chicago," September 25, 1974.
- o U.S. Department of Energy, "Formerly Utilized MED/AEC Sites Remedial Action Program, Radiological Survey of the Museum of Science and Industry, 57th Street and Lake Shore Drive, Chicago, Illinois, Final Report," (DOE/EV-0005/13) February 1979.